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LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or a LM609 grafted light chain variable region polypeptide referenced as SEQ ID NO:8, said antibody or functional fragment thereof baving integrin  $\alpha_{\nu}\beta_{3}$  binding activity, integrin  $\alpha_{\nu}\beta_{3}$  binding specificity or integrin  $\alpha_{\nu}\beta_{3}$ -inhibitory activity, wherein the  $\alpha_{\nu}\beta_{3}$  binding affinity of said enhanced LM609 grafted antibody is maintained relative to parental LM609 grafted antibody.

60. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said  $V_{\rm H}$  CDR1 is selected from the group consisting of the CDRs referenced as SEQ ID NO:48, SEQ ID NO:50 and SEO ID NO:52.

61. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V, CDR2 is selected from the group consisting of the CDRs referenced as SEQ ID NO:54, SEQ ID NO:56 and SEQ ID NO:58.

- 62. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said  $V_H$  CDR3 is selected from the group consisting of the CDRs referenced as SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100.
- 63. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said  $V_L$  CDR1 is the CDR referenced as SEQ ID NO:82.

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64. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said  $V_L$  CDR2 is the CDR referenced as SEQ ID NO:84.

65. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said V<sub>L</sub> CDR3 is selected from the group consisting of the CDRs referenced as SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90 and SEQ ID NO:92;

67. (Amended) The enhanced LM609 grafted antibody of claim 66, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.

69. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said enhanced LM609 grafted antibody comprises the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:70;

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR3 referenced as SEQ ID NO:86, the  $V_H$  CDR2

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referenced as SEQ ID NO:56 and the  $V_{\rm H}$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and  $V_H$  CDR3/referenced as SEQ ID NO:68; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and  $V_H$  CDR3 referenced as SEQ ID NO:68.

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71. (Amended) The enhanced LM609 grafted antibody of claim 70, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab) and scFV.

73. (Amended) The enhanced LM609 grafted antibody of claim 107, wherein said enhanced LM609 grafted antibody comprises the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:96;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:98; and

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the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:100.

\mathcal{H}. (Twice amended) A high affinity LM609 grafted antibody exhibiting selective binding affinity to  $\alpha_v\beta_3$ , or a functional fragment thereof, comprising one or more CDRs having at least one amino acid substitution in one or more CDRs of a LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or a LM609 grafted light chain variable region polypeptide referenced as SEQ ID NO:8, said antibody or functional fragment thereof having integrin  $\alpha_v\beta_3$  binding activity, integrin  $\alpha_v\beta_3$  binding specificity or integrin  $\alpha_v\beta_3$ -inhibitory activity, wherein the  $\alpha_v\beta_3$  binding affinity of said high affinity LM609 grafted antibody is higher affinity relative to parental LM609 grafted antibody.

77. (Amended) The high affinity LM609 grafted antibody of claim 108, wherein said high affinity LM609 grafted antibody comprises the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID WO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2

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referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:70;

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR3 referenced as SEQ ID NO:86, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:96;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:98; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:100.

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80. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V<sub>H</sub> CDR1 selected from the group consisting of the CDRs referenced as SEQ ID NO:48, SEQ ID NO:50 and SEQ ID NO:52.

82. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a  $V_{\rm H}$  CDR2 selected from the group consisting of the CDRs referenced as SEQ ID NO:54, SEQ ID NO:56 and SEQ ID NO:58.

84. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V<sub>H</sub> CDR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:94, SEQ ID NO:96, SEQ ID NO:98 and SEQ ID NO:100.

86. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a V<sub>L</sub> CDR1 referenced as SEQ ID NO:82.

88. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a  $V_L$  CDR2 referenced as SEQ ID NO:84.

90. (Amended) The antibody of claim 109, or functional fragment thereof, comprising a  $V_L$  ODR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90 and SEQ ID NO:92.

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92. (Amended) The antibody of claim 109, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR1 referenced as SEQ PD NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:70;

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR3 referenced as SEQ ID NO:86, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and  $V_H$  CDR3 referenced as SEQ ID NO:68; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and  $V_H$  CDR3 referenced as SEQ ID NO:68.

93. (Amended) The antibody of claim 92, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.



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94. (Amended) The antibody of claim 109, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:96;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDRB referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:98; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:100.

- 95. (Amended) The antibody of claim 94, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.
- 96. (Amended) The antibody of claim 109, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3

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referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:70;

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR3 referenced as SEQ ID NO:86, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID No:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:96;

the  $V_{\scriptscriptstyle L}$  CDR3 referenced as SEQ ID NO:90 and the  $V_{\scriptscriptstyle H}$  CDR3

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referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:98; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:100.

## Please add the following new claims.

105. (New) The enhanced LM609 grafted antibody of claim 74, wherein said enhanced LM609 grafted antibody has an increased association rate relative to parental LM609 grafted antibody.

106. (New) The enhanced LM609 grafted antibody of claim 74, wherein said enhanced LM609 grafted antibody has a decreased dissociation rate relative to parental LM609 grafted antibody.

107. (New) An enhanced LM609 grafted antibody exhibiting selective binding affinity to  $\alpha_{\nu}\beta_{3}$ , or a functional fragment thereof, comprising one or more CDRs selected from the group consisting of SEQ ID NO:48, SEQ ID NO:50, SEQ ID NO:52, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:58, SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:82, SEQ ID NO:84, SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100, said antibody of functional fragment thereof having integrin  $\alpha_{\nu}\beta_{3}$  binding activity, integrin  $\alpha_{\nu}\beta_{3}$  binding

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specificity or integrin  $\alpha_{\nu}\beta_{3}$ -inhibitory activity, wherein the  $\alpha_{\nu}\beta_{3}$  binding affinity of said enhanced LM609 grafted antibody is maintained relative to parental LM609 grafted antibody having CDRs of the LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or the LM609 grafted light chain variable region polypeptide referenced as SEQ ID NO:8.

108. (New) A high affinity LM609 grafted antibody exhibiting selective binding affinity to  $\alpha_v \beta_3$ , or a functional fragment thereof, comprising one or more CDRs selected from the group consisting of SEQ ID NO: 48, SEQ ID NO:50, SEQ ID NO:52, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ TD NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:82, SEQ ID NO:84, SEQ JD NO:86, SEQ ID NO:88, SEQ ID NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100, said antibody/or functional\_fragment thereof having integrin  $\alpha_{\nu}\beta_{3}$  binding activity. Integrin  $\alpha_{\nu}\beta_{3}$  binding specificity or integrin  $\alpha_{\nu}\beta_{3}$ -inhibitory activity, wherein the  $\alpha_{\nu}\beta_{3}$ binding affinity of said high affinity LM609 grafted antibody is higher affinity relative to parental LM609 grafted antibody having CDRs of the LM609 grafted heavy chain variable region polypeptide referenced as SEQ ID NO:6 or the LM609 grafted light chain variable region polypeptide referenced\as SEQ ID NO:8.

109. (New) An antibody, or a functional fragment thereof, comprising one or more CDRs selected from the group consisting of SEQ ID NO:48, SEQ ID NO:50, SEQ ID NO:52, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:58, SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID

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NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:82, SEQ ID NO:84, SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100.

thereof, comprising one or more CDRs selected from the group consisting of SEQ ID NO:48, SEQ ID NO:50, SEQ ID NO:52, SEQ ID NO:54, SEQ ID NO:56, SEQ ID NO:58, SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:82, SEQ ID NO:84, SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90, SEQ ID NO:92, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100, said antibody or functional fragment thereof having integrin  $\alpha_{\nu}\beta_{3}$  binding activity, integrin  $\alpha_{\nu}\beta_{3}$  binding specificity or integrin  $\alpha_{\nu}\beta_{3}$ -inhibitory activity.

111. (New) The antibody of claim 110, or functional fragment thereof, comprising a  $V_{\text{H}}$  CDR1 selected from the group consisting of the CDRs referenced as SEQ ID NO:48, SEQ ID NO:50 and SEQ ID NO:52.

112. (New) The antibody of claim 111, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.

113. (New) The antibody of claim 110, or functional fragment thereof, comprising a  $V_{\rm H}$  CDR2 selected from the group consisting of the CDRs referenced as SEQ ID NO:54, SEQ ID NO:56 and SEQ ID NO:58.

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- 114. (New) The antibody of claim 113, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.
- 115. (New) The antibody of claim 110, or functional fragment thereof, comprising a V<sub>H</sub> CDR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:60, SEQ ID NO:62, SEQ ID NO:64, SEQ ID NO:66, SEQ ID NO:68, SEQ ID NO:70, SEQ ID NO:72, SEQ ID NO:74, SEQ ID NO:76, SEQ ID NO:78, SEQ ID NO:80, SEQ ID NO:94, SEQ ID NO:96; SEQ ID NO:98 and SEQ ID NO:100.
- 116. (New) The antibody of claim 115, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.
- 117. (New) The antibody of claim 110, or functional fragment thereof, comprising a  $V_L$  CDR1 referenced as SEQ ID NO:82.
- 118. (New) The antibody of claim 117, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.
- 119. (New) The antibody of claim 110, or functional fragment thereof, comprising a  $V_L$  CDR2 referenced as SEQ ID NO:84.
- 120. (New) The antibody of claim 119, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.



(New) \ The antibody of claim 110, or functional fragment thereof, compr\hat{ising a \$V\_L\$ CDR3 selected from the group consisting of the CDRs referenced as SEQ ID NO:86, SEQ ID NO:88, SEQ ID NO:90 and SEQ ID NO:92.

The antibody of claim 121, wherein said 122. functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.

The antibody of claim 110, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ LD NO:82 and the  $V_H$  CDR3 referenced as SEQ |ID NO:68;

the V<sub>L</sub> CDR1 referenced as SEQ ID NO:82, the V<sub>H</sub> CDR2 referenced as SEQ ID NO:56 and the  $V_{\rm H}$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ\ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the VH CDR3 referenced as SEQ ID No:72;

the  $V_L$  CDR1 referenced as SEQ NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the VM CDR3 referenced as SEQ ID NO:70;

the  $V_L$  CDR1 referenced as SEQ ID NQ:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR3 referenced as SEQ ID NO: 36, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_{\text{H}}$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and  $V_H$  CDR3

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referenced as SEQ ID NQ:68; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:96 and  $V_H$  CDR3 referenced as SEQ ID NO:68.

124. (New) The antibody of claim 123, wherein said functional fragment is selected from the group consisting of Fv, Fab, F(ab)<sub>2</sub> and scFV.

125. (New) The antibody of claim 110, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:96;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:98; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:100.

126. (New) The antibody of claim 125, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.

127. (New) The antibody of claim 110, or functional fragment thereof, comprising the combination of CDRs selected from the group consisting of:

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as \$EQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:70;

the  $V_L$  CDR1 referenced as SEQ ID NO:82 and the  $V_H$  CDR3 referenced as SEQ ID NO:72;

the  $V_L$  CDR3 referenced as SEQ ID NO:86, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO: 90, the  $V_H$  CDR2 referenced as SEQ ID NO: 56 and the  $V_H$  CDR3 referenced as SEQ ID NO: 94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2

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referenced as SEQ ID NO:56 and  $V_H$  CDR3 referenced as SEQ ID NO:68;

the  $V_L$  CDR1 referenced as SEQ ID NO:82, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:96;

the  $V_L$  CDR3 referenced as SEQ ID NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:94;

the  $V_L$  CDR3 referenced as SEQ TD NO:90 and the  $V_H$  CDR3 referenced as SEQ ID NO:98; and

the  $V_L$  CDR3 referenced as SEQ ID NO:90, the  $V_H$  CDR2 referenced as SEQ ID NO:56 and the  $V_H$  CDR3 referenced as SEQ ID NO:100.

128. (New) The antibody of claim 127, wherein said functional fragment is selected from the group consisting of Fv, Fab,  $F(ab)_2$  and scFV.

## <u>REMARKS</u>

Claims 56-104 are pending. Claims 56-59, 62, 65-68, 70-77, 84, 90, 91 and 94-97 are under examination as reading on the elected species. Claims 60, 61, 63, 64, 69, 78-83, 92 and 93 are withdrawn as directed to a nonelected species, and claims 98-104 are withdrawn as directed to a nonelected invention. Applicant requests clarification as to whether claims 86-89 are under examination or withdrawn from consideration.